

WHAT IS CLAIMED IS:

1. A positive resist composition comprising:
  - (A) an alkali-soluble polysiloxane resin;
  - (B) an acid generator composed of a compound which generates an acid upon irradiation of active light or radiant ray; and
  - (C) a compound in which at least one hydrogen atom of the phenolic hydroxyl group or carboxyl group of the compound is substituted with an acid-decomposable group.
2. A positive resist composition according to claim 1, wherein said Ingredient (A) is an alkali-soluble polysiloxane resin comprising (a1) a siloxane unit containing an alkali-soluble group, and (a2) a siloxane unit containing an alkali-insoluble group, said alkali-insoluble group having no acid-decomposable group.
3. A positive resist composition according to claim 2, wherein the alkali-soluble group of said siloxane unit (a1) is at least one of hydroxyl group and carboxyl group.
4. A positive resist composition according to claim 3, wherein, in said siloxane unit (a1), the alkali-soluble group is bonded to the silicon atom of a siloxane group

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through at least one group selected from the group consisting of alkylene groups, cycloalkylene groups and aralkylene groups.

5. A positive resist composition according to claim 4, wherein said siloxane unit (a1) is a hydroxybenzylsilsesquioxane unit.

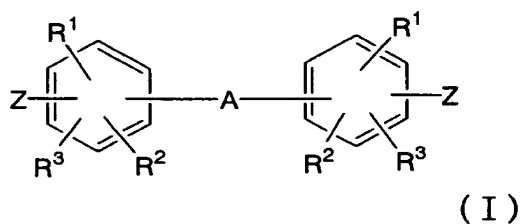
6. A positive resist composition according to claim 2, wherein said alkali-insoluble group having no acid-decomposable group of said siloxane unit (a2) is at least one selected from the group consisting of alkyl groups, cycloalkyl groups, aryl groups and aralkyl groups.

7. A positive resist composition according to claim 6, wherein said siloxane unit (a2) is a phenylsilsesquioxane unit.

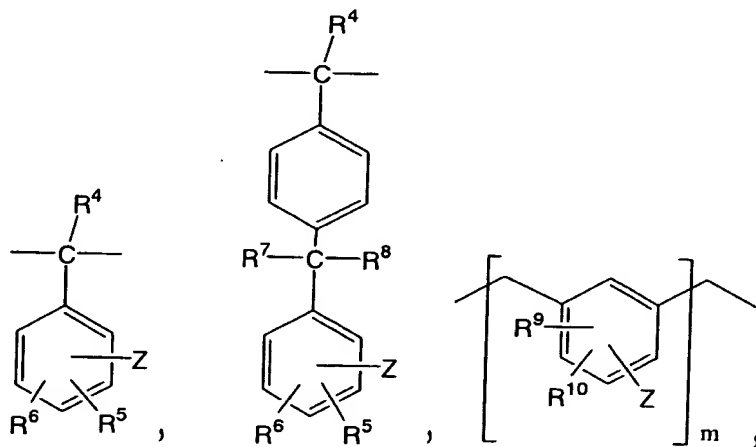
8. A positive resist composition according to claim 1, wherein said Ingredient (C) is a compound in which at least one hydrogen atom of the hydroxyl group or carboxyl group of a compound of following Formula (I) is substituted with an acid-decomposable group, said acid decomposable group being selected from the group consisting of tertiary-alkyloxycarbonyl-substituted alkyl groups, tertiary-

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alkyloxycarbonyl groups, tertiary-alkyl groups, cyclic ether groups and alkoxy-substituted alkyl groups:



wherein Z is a hydroxyl group or a carboxyl group; each of R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> is independently a hydrogen atom, a hydroxyl group, a halogen atom, an alkoxy group having from 1 to 5 carbon atoms, or a linear, branched or cyclic alkyl group having from 1 to 6 carbon atoms; A is a single bond or a divalent organic group selected from the group consisting of alkylene groups each having from 1 to 5 carbon atoms, alkylidene groups each having from 2 to 5 carbon atoms, alkylene groups each having from 1 to 5 carbon atoms and further having a carboxyl group, alkylidene groups each having from 2 to 5 carbon atoms and further having a carboxyl group, a carbonyl group, and groups of the following formulae:



R<sup>4</sup> is a hydrogen atom or an alkyl group having from 1 to 5 carbon atoms; each of R<sup>5</sup> and R<sup>6</sup> is independently a hydrogen atom, a halogen atom, a hydroxyl group, an alkyl group having from 1 to 5 carbon atoms, or an alkoxy group having from 1 to 5 carbon atoms; each of R<sup>7</sup> and R<sup>8</sup> is independently an alkyl group having from 1 to 5 carbon atoms; each of R<sup>9</sup> and R<sup>10</sup> is independently a hydrogen atom, a hydroxyl group or an alkyl group having from 1 to 5 carbon atoms; and m denotes an integer from 1 to 6.

9. A positive resist composition according to claim 8, wherein said acid-decomposable group is at least one selected from the group consisting of tert-butyloxycarbonylmethyl group, tert-butyloxycarbonyl group, tert-butyl group, tetrahydrofuranyl group, tetrahydropyranyl group, ethoxyethyl group and methoxypropyl group.

10. A base material comprising:

an organic polymer layer as a first layer formed on a substrate; and

a second resist layer formed on said organic polymer layer, said second resist layer being composed of a positive resist composition according to any one of claims 1 to 9 and having a thickness of from 50 to 200 nm.

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